

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Gatorade

#### GENEDGE ALLIANCE

#### Blue Ridge Gatorade Enhances Bottling Production with Lean/Six Sigma

##### Client Profile:

Blue Ridge Gatorade (BRG) produces and distributes Gatorade, Propel and other beverages at its plant in Wytheville, Virginia. Gatorade Thirst Quencher was invented at the University of Florida to assist their athletes in combating the dehydration that limited their performance. It is the nation's leading sports drink, scientifically formulated to fuel athletic performance and backed by more than 40 years of research. BRG employs 230 people.

##### Situation:

As part of the Total Productive Maintenance program already in place at BRG, management was looking for tools to deal with more difficult projects. Six Sigma was one of the tools considered. BRG sent representatives to attend a Lean / Six Sigma overview session at Merillat Industries (in Atkins, Virginia), conducted by the Manufacturing Technology Center (MTC), a service delivery partner of GENEDGE ALLIANCE, formerly Virginia's A.L. Philpott Manufacturing Extension Partnership (VPMEP), a NIST MEP network affiliate. The company was considering the possibility of using Six Sigma training to solve their more difficult projects. After the informational session, BRG contacted MTC for enrollment in their Six Sigma Green Belt training program.

##### Solution:

MTC conducted their 12-week Six Sigma Green Belt training program, which requires each student to complete a real project at their company while mentored by MTC Black Belts. The training covers all aspects of Six Sigma commensurate with Green Belt training. Emphasis is placed on each student's specific projects and the application of the DMAIC (Define, Measure, Analyze, Improve and Control) methodology and tools. The tools acquired during training were DMAIC methodology of problem solving, brainstorming techniques, Fishbone Diagram, analyzing data, SIPOC (Suppliers, Inputs, Process, Outputs, Customers), and measurement system analysis.

BRG identified two projects for each of its participants sent to the training. In the first project, participants focused on bottle rejects reduction due to label defects, specifically label height, which represented 53 percent of all bottle rejects on one of the labelers. This included reducing or eliminating the temporary labor that was required to manually inspect bottle rejects. During the project, it was discovered that the current measurement system was inadequate and contributing to the high reject rate. In the second project, the focus was on a new bottle design. There was a significant increase in downed bottles on the line, representing an efficiency loss of 93.9 percent. The participants focused on the number of downed bottles to improve overall efficiency and reduce temporary labor content. Reduction of this downtime would increase output and reduce and/or eliminate temporary labor devoted to 'righting the bottles.' This project required establishing a measurement system to deal with downed bottles and the location of where the defects were occurring.

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#### **Results:**

- \* Reduced all defects by 73 percent.
- \* Increased output by 23.4 percent.
- \* Realized more than \$381,000 in cost savings.
- \* 83,631 less bottle rejects over 4-week period.

#### **Testimonial:**

"Working with the MTC for Six Sigma training has proven to be extremely beneficial in helping us solve some of our more complex issues. We have been able to utilize the Six Sigma DMAIC methodologies to drive process improvements, which has translated into increased efficiencies and cost avoidance. The training also helped develop the workforce providing new troubleshooting skills and analytical tools to the broader team. The bottom line is increased product availability and a better quality product for the consumer. I would highly recommend this training to any company who is struggling to solve reoccurring issues."

Kevin French, Production Resource Leader